

Practitioner's Docket No.

944-003.083

**PATENT** 

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129' " M.P.E.P. § 601, 7th ed.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Box Patent Application Assistant Commissioner for Patents** Washington, D.C. 20231

#### NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s):

Woonhee HWANG and Mattias WAHLQVIST

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title):

RRM Optimization on Iur for Congestion Control

#### CERTIFICATION UNDER 37 C.F.R. § 1.10\*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date \_\_\_ 5-17-01 as "Express Mail Post Office to Addressee," mailing Label Number EL 628640685 US dressed to the. Assistant Commissioner for Patents, Washington, D.C. 20231

### Judith Schick

(type or print name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

\*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

> "Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

> > (New Application Transmittal [4-1]—page 1 of 11)

#### 1. Type of Application

This new application is for a(n)

(check one applicable item below)

×	Original (nonprovisional)
	Design
	☐ Plant
WARNING	Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WARNING	: Do not use this transmittal for the filing of a provisional application
11	one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION RANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION
	Divisional.
	Continuation.
	Continuation-in-part (C-I-P).
Renef	it of Prior II S. Application(s) (25 II C.C. SS 440(s) 400

# 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
  - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

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WARNING:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
1	The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3. Papers	Enclosed
(Desi	uired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 gn) Application
	Pages of specification
2	Pages of claims
4	Sheets of drawing
WARNING:	<b>DO NOT</b> submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G 57-62).
invo the on	entifying indicia, if provided, should include the application number or the title of the invention, entor's name, docket number (if any), and the name and telephone number of a person to call if Office is unable to match the drawings to the proper application. This information should be placed the back of each sheet of drawing a minimum distance of 1.5 cm. ( $\S_b$ inch) down from the top of page" 37 C.F.R. § 1.84(c)).
	(complete the following, if applicable)
;	The enclosed drawing(s) are photograph(s). Three (3) sets of photographs and a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)" are attached. 37 C.F.R. § 1.84(b).
•	The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).
X	formal
Î 🗆 i	informal
B. Othe	r Papers Enclosed
	Pages of declaration and power of attorney
	Pages of abstract
-	Other
4. Additio	nal papers enclosed
	Amendment to claims
!	Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
!	Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)

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	Ц	Telimiary Americanem
	$\boxtimes$	Information Disclosure Statement (37 C.F.R. § 1.98)
2	X	Form PTO-1449 (PTO/SB/08A and 08B)
,	Ø	Citations
		Declaration of Biological Deposit
l		Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
		Authorization of Attorney(s) to Accept and Follow Instructions from Representative
i		Special Comments
1		Other
5. De	cla	ration or oath (including power of attorney)
NOTE:	the by ap the by be de pe	newly executed declaration is not required in a continuation or divisional application provided that a prior nonprovisional application contained a declaration as required, the application being filed is all or fewer than all the inventors named in the prior application, there is no new matter in the inplication being filed, and a copy of the executed declaration filed in the prior application (showing a signature or an indication thereon that it was signed) is submitted. The copy must be accompanied a statement requesting deletion of the names of person(s) who are not inventors of the application ring filed. If the declaration in the prior application was filed under § 1.47, then a copy of that inclaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning its on under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently ecuted declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3)
NOTE:	ab co	declaration filed to complete an application must be executed, identify the specification to which it directed, identify each inventor by full name including family name and at least one given name, without breviation together with any other given name or initial, and the residence, post office address and untry or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 F.R. § 1.63(a)(1)–(4).
NOTE:	as as is t this	he inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under a paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).
[	_	Enclosed
		Executed by
		(abade all annitable bases)
		(check all applicable boxes)
		inventor(s).
		legal representative of inventor(s).  37 C.F.R. §§ 1.42 or 1.43.
		<ul> <li>joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.</li> </ul>
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.
2	≰ ।	Not Enclosed.
NOTE:	the may	ere the filing is a completion in the U.S. of an International Application or where the completion of U.S. application contains subject matter in addition to the International Application, the application y be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE R NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
	[	Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s)

(The declaration o	or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
	Showing that the filing is authorized.  (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inventorship Sta	atement
<b>WARNING:</b> If the name ownership submitted.	ned inventors are each not the inventors of all the claims an explanation, including the poof the various claims at the time the last claimed invention was made, should be
The inventorship for	or all the claims in this application are:
☐ The same	o.
	or
<ul><li>Not the satisfier</li><li>Not the satisfier</li></ul>	ame. An explanation, including the ownership of the various claims at the last claimed invention was made,
☐ is sub	omitted.
☐ will b	e submitted.
7. Language	
An English trar required by 37	including a signed oath or declaration may be filed in a language other than English. Install no state of the non-English language application and the processing fee of \$130.00 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may Office. 37 C.F.R. § 1.52(d).
🔀 English	
☐ Non-Engli	sh
	attached translation includes a statement that the translation is accu-37 C.F.R. § 1.52(d).
8. Assignment	
☐ An assign	ment of the invention to
MENT	ached. A separate   "COVER SHEET FOR ASSIGNMENT (DOCU- ) ACCOMPANYING NEW PATENT APPLICATION" or  FORM PTO is also attached.
☐ will fo	flow.
NOTE: "If an assignmer and one for the	nt is submitted with a new application, send two separate letters-one for the application assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
<b>WARNING:</b> A newly ex- in-part app	ecuted "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation- lication is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.
☐ This is a	☐ continuation ☐ divisional application and the assignment
document	for the parent application 0 / was filed
on	<del></del>
	Reel
	Frame
	(New Application Transmittal [4-1]—page 5 of 11)

9. Certified Copy

Certified copy(ies) of app	olication(s)			
Country	Appln. No.		Filed	
Country	Appln. No.		Filed	
Country	Appln. No.		Filed	
from which priority is claim	ed			
☐ is (are) attached				
will follow.				
NOTE: The foreign application declaration. 37 C.F.R.	forming the basis for the claim fo § 1.55(a) and 1.63	or priority must	be referred to in the oath or	
U.S. application or Intel § 120 is itself entitled to	eign prionty for which the applicational Application from which the priority from a prior foreign application TRANSMITTAL WHERE	us application co cation, then con	laims benefit under 35 U.S.C. nplete item 18 on the ADDED	
<ul><li>10. Fee Calculation (37 of A. Regular application)</li></ul>				
	CLAIMS AS FILED			
Number filed			Doois For	
Number med	Number Extra	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$710.00	
Total Claims (37 C.F.R. § 1.16(c))	- 20 = - O - ×	\$ 18.00		
Independent				
Claims (37 C.F.R. § 1.16(b))	- 3 = -0 ~ ×	\$ 80.00		
Multiple dependent claim(s) if any (37 C.F.R. § 1.16(d)		\$270.00		
☐ Amendment can	celling extra claims is encl	osed.		
☐ Amendment dele	eting multiple-dependencies	s is enclosed	i.	
☐ Fee for extra cla	ims is not being paid at th	is time.		
NOTE: If the fees for extra claim prior to the expiration o notice of fee deficiency	s are not paid on filing they must be f the time period set for response . 37 C.F.R. § 1.16(d).	paid or the clai by the Patent	ms cancelled by amendment, and Trademark Office in any	
	Filing Fee Calculation		\$ 7/0	
B. Design application (\$310.00—37 C.				
	Filing Fee Calculation		\$	

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	Plant application (\$480.00—37 C.F	B & 1.16(a))	
	(* '***	Filing fee calculation	Φ
11. Small	Entity Statemen	_	\$
	_	· .	itity under 37 C.F.R. § 1.9 and 1.27
	is (are) attached.	and is a ming by a small en	and 1.27
WARNING:	the status is available affect any other application of an application a continued prosecula new determination application. A nonprinapplication or in the reference to the statement in the prindesired. The paymen	e and desired. Status as a small plication or patent, including appuron the application or patent in an under § 1.53 as a continuation tion application under § 1.53(d)), as to continued entitlement to smovisional application claiming berolication, or a reissue application patent if the nonprovisional application or application or application or application or application or application or in the patent and application application application or in the patent application applicat	shed in each application or patent in which entity in one application or patent does not plications or patents which are directly of which the status has been established. The in, division, or continuation-in-part (including or the filling of a reissue application requires half entity status for the continuing or reissue nefit under 35 U.S.C. § 119(e), 120, 121, or may rely on a statement filed in the prior incation or the reissue application includes a or in the patent or includes a copy of the distatus as a small entity is still proper and in filling fee will be treated as such a reference
WARNING:	"Small entity status m can <b>unequivocally</b> m 1996 (emphasis adde	nake the required self-certification	person or persons signing the : . statement n." M.P.E.P., § 509.03, 6th ed., rev. 2, July
	(co	mplete the following, if ap	plicable)
	Status as a small	entity was claimed in prio	r application
is	s being claimed f	, filed on or this application under:	, from which benefit
		119(e), 120, 121, 365(c),	
	and which status	as a small entity is still p	roper and desired.
	☐ A copy of the	e statement in the prior ap	oplication is included.
	Filing Fee Cald	culation (50% of A, B or C	above)
		\$	
are i	excess of the full fee p filed within 2 months ndable under § 1.136	of the date of timely payment of	y status is established and a refund request of a full fee. The two-month period is not
12. Reque	st for Internation	nal-Type Search (37 C.F.F	R. § 1.104(d))
		(complete, if applicable	)
□ P W	Please prepare an i vhen national exar	nternational-type search re mination on the merits tak	port for this application at the time es place.

10. 1			Tent Being Made at This Time	
		_	Enclosed	
		X	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. subsequently.)	§ 1.16(e) can be paid
		Enc	losed	
			Filing fee	\$
			Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$
			For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
			Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$
			Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
NOTE	fa 3: ei	illing to 7 C.F.F ther th	R. § 1.21(I) establishes a fee for processing and retaining any apply complete the application pursuant to 37 C.F.R. § 1.53(f) and to R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the bene basic filing fee must be paid, or the processing and retention year from notification under § 53(f).	his, as well as the changes to efit of a prior U.S. application.
			Total fees enclosed	\$
14. N	/leth	od o	f Payment of Fees	
		Atta	ched is a check money order in the amount	of \$
		Auth	orization is hereby made to charge the amount of	\$
			to Deposit Account No	
			to Credit card as shown on the attached credit card tion form PTO-2038.	d information authoriza-
WARN	VING	: Cred	dit card information should <b>not</b> be included on this form as it i	may become public.
!			ge any additional fees required by this paper or on the manner authorized above.	credit any overpayment
		,	A duplicate of this paper is attached.	

1

5. Au	ıthori	zation to Charge Additional Fees
WARN	NG: I	no fees are to be paid on filing, the following items should not be completed
WARNI	NG: A	ccurately count claims, especially multiple dependent claims, to avoid unexpected high charges, extra claim charges are authorized.
	fol	e Office is hereby authorized to charge, in the manner shown above, the lowing additional fees that may be required by this paper and during the entire ndency of this application.
		37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
		37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
NOTE:	must e set for to auti	se additional fees for excess or multiple dependent claims not paid on filing or on later presentation only be paid or these claims cancelled by amendment prior to the expiration of the time period response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not thorize the PTO to charge additional claim fees, except possibly when dealing with amendments and action.
		37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
		37 C.F.R. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a)).
		37 C.F.R. § 1.17 (application processing fees)
NOTE:		written request may be submitted in an application that is an authorization to troot any account of

NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(New Application Transmittal [4-1]—page 9 of 11)

	Inco	poration by reference of added pages
	p si tf	check the following item if the application in this transmittal claims the benefit of rior U.S. application(s) (including an international application entering the U.S. tage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
		Number of pages added
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
_		Number of pages added
X	State	ment Where No Further Pages Added
	(if th	no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)
	×	This transmittal ends with this page.

16.	Instructions	as	to	Overpayment
	111000 00010110	40	•	Overburnen

NOTE:	". Amounts of twenty-five dollars or less will not be returned unless specifically requested within
	a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may
	be returned by check or, if requested, by credit to a deposit account " 37 CFR § 1 26(a)
	Credit Account No.
	Refund

Reg. No. 31,391

Tel. No. (203 261-1234

Customer No. 004955

Tanis Maquire
SIGNATURE OF PRACTITIONER

Francis J. Maguire
(type or print name of attorney)

WARE, FRESSOLA, VAN DER SLUYS & ADOLPHSON P.O. Address LLP

755 Main Street, PO Box 224

Monroe CT 06468
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